RECLAMATION
Managing Water in the West

December 2016

Safety and
Occupational Health

The Safety Factor

# Baseline Assessment of Perceptions of the Safety Culture at Reclamation

Estevan R. López | Commissioner

Last year, you were invited to share your thoughts on the safety culture within the Bureau of Reclamation through an electronic survey. The survey was part of Reclamation's Safety Action Plan, a broad effort of 21 teams to tackle specific areas of concern with respect to safety culture and practices at Reclamation. Team 14 was tasked with providing a baseline measure of safety culture at Reclamation. I am pleased to share their report with you.

Employee response was impressive. More than 3,000 employees provided their thoughts on several aspects of Reclamation's safety culture. The results show how Reclamation's safety culture varies between workplaces and regions and highlights what we are doing right, and where we have room for improvement. These insights will help Reclamation recreate successful aspects of safety cultme while tailoring improvements to the needs of different workplaces. Moreover, this report will provide a candid, measureable baseline by which Reclamation may confirm whether our efforts to improve safety culture are working as additional surveys are completed over time.

I would like to sincerely thank every employee who took the time to complete the survey. Your responses provide valuable insight to Reclamation as it moves forward in implementing the recommendations of the Safety Action Plan teams. That said, improving Reclamation's safety culture will require a team effort in which you play a critical role. It doesn't matter if you are a manager, team leader or a worker, let your words and actions send the message: "I Care About Safety."

Click here to read Baseline Assessment of Employee Perceptions of Safety Culture.

## INSIDE THIS ISSUE



U.S. Department of the Interior
Bureau of Reclamation

# Safety Updates


Ken Brockman, in his yellow safety vest, is at his daily morning briefing with to his co-workers from the U.S. Army Corps of Engineers. Ken, an employee of theTechnical Service Center, in Denver, Colorado, is working as a Technical Monitor in Baton Rouge, Louisiana. The Technical Monitors conduct the final inspections of modular housing units provided by the Federal Emergency Management Agency and installed by private contractors, to survivors of the historic flooding in the Baton Rouge area in August 2016.

## Haul and Install Mission

Michael Mcmorris | Program and Emergency Management Office – PEMO | Denver Office

The Bureau of Reclamation received a request for assistance from U.S Army Corps of Engineers (USACE) for a "Haul and Install Mission" to conduct quality assurance of contractors installing temporary housing units (modular homes) at new group locations, previously existing group locations, and at previous single family home locations in the Baton Rouge, Louisiana area. We answered the call by sending 14 Reclamation personnel who are currently working 12 hours a day and 7 days a week in support of this mission.

Some of our volunteers will extend past their current 29 day mission and others will join them as we continue supporting this mission of helping fellow Americans in what some are phrasing as heads to beds mission. Reclamation will be sending more volunteers for a few more 29 day rotations taking us into March 2017.

Grant Sorensen from Program and Emergency Management Office (PEMO) is our Point of Contact in Baton Rouge and is the Team Leader/Liaison with USACE.

## Spotlight: Patricia Cronin Deploys to Assist FEMA

Grant Sorensen | Program and Emergency Management Office – PEMO | Denver Office

Patricia Cronin is a civil engineer in the Civil Structures Group in the Bureau of Reclamation's Technical Service Center in Denver, Colorado. Working as a Reclamation Disaster Response Worker in Baton Rouge, Louisiana, Patricia conducted Site Inspection Reports (SIR) as part of the Federal Emergency Management Agency's (FEMA) Temporary Housing Program. One of the options of the Temporary Housing Program is providing modular housing units to disaster survivors either adjacent to their flood damaged home on their property, placing the modular housing units in existing home parks, or placing the units in new home parks.

The first step in the modular housing unit process involves performing a site inspection to determine the feasibility of locating the modular units. This involves meeting with the applicant and inspecting the property to locate the property boundaries of the proposed site to determine if there is sufficient space available to place desired modular housing unit. The next steps include identifying utility lines, any obstacles that might interfere in placing a modular housing unit on the site, looking for access limitations to the site, ensuring there is enough room for unit delivery,

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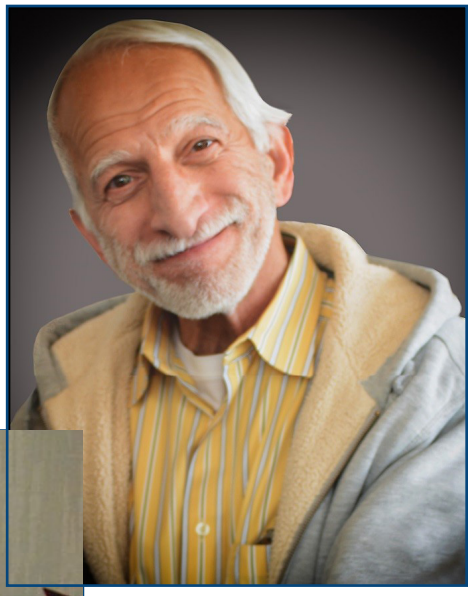
Patricia Cronin, a civil engineer in the Civil Structures Group in the Bureau of Reclamation's Technical Service Center in Denver, Colorado, describing the site inspection process to an applicant for a FEMA mobile housing unit.

# In Memoriam: Dino Alaraji

Daniel Picard | UC Deputy Regional Director

It is with great sadness that I send this message to each one of you. Wednesday, November 9, Dino (Abdulla) Alaraji unexpectedly passed away at his home. Dino was a member of the Upper Colorado safety team, duty stationed at the Regional Office. I know Dino as a dedicated federal employee who served for more than 35 years in the civil service, most of which was with the Upper Colorado Region for Reclamation. He served each one of us in an unassuming way, working, for the most part, behind the scenes to make our workplace a better place. He was interested in each one of you and your personal health, safety, and wellness. Our sympathy goes out to Dino's wife and all who feel this great loss. We are going to miss Dino immensely.




If there is one picture (left) that describes him as we knew him, this is it. Please take a moment to observe the items in the background. The titles on the books, the quote, the scale or balance. These are the things he knew and practiced. They surrounded him and were a part of him. He was always quick to use them to help us be safer and live a better quality of life.

## A Tribute to Dino

Andrew Wood | Security and Dam Safety | Upper Colorado Region

Dino was a wealthy man who left behind a treasure for us all. As I think about Dino I am left with a lot of good memories. He was an example of quiet selfless service. His greatest satisfaction seemed to come from helping others. His professional pursuit started with medicine and continued with time, which always allowed him to help others in so many ways. He learned and came to know a lot in the fields of science and medicine. He did not seek to enrich himself, but used his knowledge to help others. Intellectually he was a serious man dedicated to his profession of Occupational Safety and Health. This was evident by looking at his work. However, to stop here does not paint the full picture of who he was and what he was like to work with.

Dino always displayed a sense of humor that was refined and full of subtle observations of common everyday life. I enjoyed going to see him about work related item or issue and inevitably we would wind up laughing at something he pointed out. As I remember conversations with him, they were frequently punctuated with laughter or snickering. I often had to wipe away tears from my eyes from his witty lines.

He knew compassion and grief, as I found out from our conversations about Iraq, dictators, and oppression. He was always respectful of those who served overseas. Having come from Iraq as a teenager, and experiencing America for most of his life, I was reminded that he did not take for granted the liberties that we enjoy in society. I considered him a great citizen. With his military and civilian government service combined he had a total of 37 years, 7 months, and 5 days.This speaks volumes to his dedication and willingness to contribute.

His observations and conclusions were always something to be respected and considered. It is sad to lose such a good person.


As Patricia Cronin (center) fills out the SIR with the applicant for a temporary modular housing unit, a representative from the contractor that will be delivering and installing the unit measures off the distance from the utilities to the proposed location for the temporary housing unit with a measuring wheel. The orange line on the tree shows the high water mark in this area of Louisiana, south of Baton Rouge, as a result of a severe storm and flooding that occurred in mid-August 2016.

**Spotlight: Patricia Cronin**

Continued from page 2

and that local fire codes and zoning laws for spacing are satisfied. Most importantly the site inspector needs to be compassionate, considerate, and professional when working with the disaster survivor.

Patricia performed her 29 day assignment from November 14 through December 12, 2016. She has been with Reclamation since 2012. Originally from Harvard, Massachusetts, where she received her degree in civil engineering from University of Massachusetts at Amherst. She worked for the New Orleans District of the U.S Army Corps of Engineers (USACE) for 3½ years prior to coming to Reclamation's Technical Service Center in Denver.

While with USACE Patricia worked in many different positions, including as a local government liaison for the New Orleans District, as a local government liaison on the National Planning and Response Team, and as a flood fight rider. When Hurricane Isaac hit the gulf coast in 2012 she coordinated the local government liaisons for that incident. In addition to working in the field during disaster response Patricia would be pulled off of her full time position in permanent structures group to supplement the staff working in the New Orleans District Emergency Operations Center when there was an incident.

"I am extremely passionate about this work. It is unbelievably rewarding to be in the field helping the survivors reconstruct their lives after a disaster. You work hard to make a positive impact, even if only a minor one, for those that have been effected by something so traumatic."

In mid-August 2016, prolonged rainfall in southern parts of Louisiana resulted in catastrophic flooding in 20 parishes that submerged thousands of houses and businesses and resulted in the loss of 13 lives. Many rivers and other waterways, especially the Amite and Comite Rivers, reached record levels, and rainfall exceeded 20 inches in multiple parishes.

**Help us learn and improve our safety culture. Send us your lessons learned or near misses.**
**Names and locations aren't necessary. Pictures appreciated.**
**Send your story for the next Safety Factor to Theresa Gallagher.**

# On the Safe Side

## Yuma Area Office Celebrates Fire and Safety Day

Juli A. Smith | Safety and Occupational Health Manager | Lower Colorado Region

On Thursday, October 13, the Yuma Area Safety Office (YAO) conducted its fourth Fire and Safety Day. The event began immediately following an all employees meeting and group photo.

The YAO Fire and Safety Day is held in October in conjunction with National Fire Prevention Month. Fire prevention month is held in anniversary of the Great Chicago Fire of 1871 that killed over 250 people. With this event we want to get people thinking in terms of safety and fire prevention rather than only firefighting.

Participants in the event were: the Rural Metro Fire Department conducting vehicle extraction demonstrations, household fire simulations, and fire extinguisher training; the Bureau of Land Management with their fire fighters and equipment; the Yuma County Sherriff Office and their rescue boats, vehicles, and information; the U.S. Border Patrol with rescue and tactical equipment; and the Yuma Police Department demonstrated their seatbelt convincer.

Also in attendance were Pinnacle Health Care, providing flu vaccinations along with health and wellness information; Yuma Regional Medical Center with health information; the Yuma County Emergency Response Team with emergency preparedness information; Sprague's Sports and R.V. providing hunting and firearms safety information; the Management Support Office demonstrating proper pre-trip vehicle inspections; and the Technical Support Office providing boating safety and awareness.

All Reclamation employees and contractors were invited to share in the educational activities and volunteer to become a part of the live demonstrations to get more hands-on experience. The event was held in the east parking lot and was followed by a lunch provided by the Reclamation Employees Association, office chiefs, and management.

## Boulder City Safety Committee and American Red Cross Conduct Successful Blood Drive


Marianne Stemmer raises her arm, as instructed, by Phlebotomist Darryl Thompson, Jr., after making her blood donation. Carrie Ronning relaxes by viewing her mobile device, while she makes her blood donation. This was the first blood drive conducted in many years in Boulder City Regional Office. Sixteen pints of blood were donated by employees.

***The job will get done when it gets done. If we need to slow things down to be safe, that is the price we pay – that's the reputation we need for Reclamation***

# Near Miss/Lessons Learned

*The only way we can learn is to share our mistakes and improve our safety culture.*
*To be a High Reliability Organization (HRO), we have to be a learning organization.*

## Accident Abstract: Transformer Accident

Monte Bowman | Chief, Safety and Occupational Health Office | Denver, Colorado


Photo by Michael L Green | SHO | Denver Office

In October 2015, personnel at Reclamation's Flaming Gorge Powerplant attempted to collect an oil sample from Station Service Transformer KR1B. The sample was not collected because the transformer was in a negative pressure condition.

On March 14, 2016, the personnel were installing a pressure gauge and nitrogen feed valve on the transformer. A vacuum pump was connected to the transformer to evacuate moisture and oxygen from inside the tank. The transformer was energized while the vacuum pump continued to evacuate the tank. Two hours after energizing, the transformer faulted inside the tank causing an over pressurization of the tank and ejection of two primary side bushings. The ejected bushing openings on the transformer tank resulted in the release of approximately 100 gallons of mineral oil. Protective relaying isolated the fault by opening breakers. The project spill prevention, control, and countermeasures plan was implemented to contain and collect the released oil.

The transformer was installed in May 2015 by a contractor. The transformer was dropped when the contractor was using a forklift to unload the transformer off of the tractor-trailer delivery truck. The contractor tested the transformer, replaced the crushed primary side connection box, and completed the installation of the transformer.

It is unclear if the internal fault is a result of the transformer being dropped during installation, a result of the gauge and valve installation work being performed, or if the latent damage from the drop initiated a failure during the maintenance work.

Direct Causes:

- Transformer damaged when dropped upon delivery to the site. Visible damage was repaired and electrical performance was tested. Physical condition of internal bracing, gasket seals and bushings were not inspected during testing.
- Transformer was energized while a vacuum was being drawn on the tank by a pump. The vacuum possibly caused an air bubble to enter the tank at a seal or a bubble from water evaporation, which in turn caused the oil to be displaced on energized parts causing an electrical fault.

Indirect Causes:

- Plant personnel were unable to take an oil sample because the transformer tank was under negative pressure.

Recommendations:

- Advise against pulling a vacuum on energized transformers.
- Advise using nitrogen blanketed, serviceable transformers for critical power plant applications.
- Ensure contract specifications require transformers are equipped with pressure gauges to determine tank's pressure.
- Follow Facility Instructions, Standards, and Techniques (FIST) 3-30 for transformer maintenance.
- Ensure ducts and conduits penetrating the transformer decks are sealed to prevent oil ingress.
- Ensure arrester jumpers are insulated cables.
- Ensure sequence-of-events recorder is properly recording events.
- Ensure sequence-of-events recorder is programmed to capture all relevant plant actions and alarms.

# On the Safe Side

*The only way we can learn is to share our mistakes and improve our safety culture. To be a High Reliability Organization (HRO), we have to be a learning organization.*

## Why Can't We Prevent All Workplace Accidents from Happening?

Don McBride | Safety and Occupational Health Manager | Phoenix Area Office

All accidents have a root cause – most can be reduced to human error or mechanical failure. Just as a company would logically have a preventive maintenance schedule and plan in place for a piece of equipment or machinery to prevent failure or downtime, a preventive maintenance plan should also be in place for its safety program. Management and employees – committed to positive change and zero-incidents and accidents.

In real life, quick decisions are usually made under difficult circumstances, uncertainty, loss of focus, fatigue, limited knowledge or training and time pressure. Sometimes the outcome of our decisions, are not what we expected or hoped for. We believe we did our best, but things went another direction (south) because we may not have had the full overview or more time to assess the situation. An accident may occur despite taking appropriate precautions.


Real life does have its blind spots. What we should have done before an accident occurred is always on our minds after the accident. How realistic is it, though, to have unlimited resources and time? How realistic is it to expect to know everything with certainty in advance to eliminate all hazards?

So let's be realistic. We cannot prevent absolutely every accident. That does not, however, take away our responsibility to do everything possible to prevent an accident from occurring.

A good example would be a construction job site. Construction job sites are complex environments with workers from multiple trades interacting in challenging circumstances. Sometimes job sites appear to be "organized chaos" due to multiple pieces of equipment operating at the same time, many workers on foot, and lots of background noise – which can all be a distraction.

The construction industry has the second highest rate of fatal accidents and work injuries. Many of these are from moving vehicle mishaps. Vehicles in work zones present many hazards. Construction companies need to pay special attention to safety concerns if they have employees working around heavy equipment and passing motor vehicle traffic. Workers can be injured by overturns and collisions.

Flaggers and workers on foot are exposed to the risk of being struck or backed-over if they are not totally visible to equipment operators. Construction management must be sure that all vehicles have fully operational back-up alarms, horns, back-up (reverse) lights, headlights and break lights. In addition, management should be pro-active and provide an open-door policy for workers to report hazards or a near-miss.

So, why do near-miss accidents go unreported? Employees may resist reporting near misses for a number of reasons. They do not want to be blamed for a mistake. They do not want to be perceived as a trouble-maker, or as careless. Many employees may not think of a near miss as a potential accident, but it is more often human nature that keeps these lessons from being reported and improving the safety program. If an employee reports a near miss, avoid assigning blame. This will only discourage near miss reporting in the future. Positive recognition for those who report close calls will encourage an incident-free culture of safety.

It is important for both management and employees to adopt a "culture of safety" to make a safety program more effective. A culture of safety is used to describe an atmosphere or culture in which safety is understood to be or is accepted as the number one priority.

If an organization fails to hold employees accountable for safety in the same way as they are held accountable for production and profit, its safety program will weaken and accidents will occur.

Unfortunately many organizations tend to place more emphasis on bottom-line profits and fail to make safety their number one priority. Unless safety is the number one priority, the organization will always be at greater risk.

Many organizations spend a lot of time and effort on improving safety and building a culture of safety. What are the financial benefits and cost savings of a culture of safety?

# Near Miss/Lessons Learned

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## Near Miss

Brent Newman | GIS Intern | Eastern Colorado Area Office

On October 16, my spouse and I were hiking in the Devil's Backbone Open Space (about 5 miles from the Eastern Colorado Area Office near Loveland, Colorado). I was well aware of the abundance of rattlesnakes in the area, but I was wearing shorts and running shoes at the time. We were walking briskly side by side on the trail talking about rattlesnakes when I suddenly heard rattling at my feet. As I was putting my foot down, I saw the snake's mouth wide open springing at my exposed leg. I immediately lifted my leg and attempted to jump over the striking snake. Fortunately, I avoided a bite just below my knee by a few inches. (The picture illustrates the position of the rattlesnake as I approached from the right.)


Photo by Brent Newman | ECAO

**Lessons learned**

Because the snake was elevated at least a foot and right on the edge of the trail, I doubt wearing boots would have protected me from a strike if I had not quickly jumped away from the snake. Knee-high snake-proof gaiters probably would have been the best protection from a bite, but the incident could have been easily mitigated if we had been walking slowly, single-file in the middle of the trail while paying close attention to where we placed each foot.

## What to Do When Winter Has You in its Icy Grip

National Safety Council

The Weather Channel calls them the "Frigid Five": Barrow, Alaska; International Falls, Minnesota.; Gunnison, Colorado; Jackson, Wyoming; and Caribou, Maine.

You may not live in one of America's five coldest cities, but that doesn't mean you don't have to protect yourself from frostbite and hypothermia. Both conditions are caused by excessive exposure to low temperatures, wind or moisture.

Cold weather can be dangerous for anyone who enjoys outdoor winter sports, and people who work outdoors during winter must be particularly mindful of the risks.

Before venturing outside in winter, read these safety tips.

Other winter safety tips from the National Safety Council:

- Be Prepared for Winter Driving
- Why Do People Die Shoveling Snow?
- Carbon Monoxide: The Invisible Killer
- Treat Frostbite Immediately

### Other Winter Safety Links

OSHA: Workplace Holiday Safety

National Safety Council Holiday Food Safety Tips

FEMA: How to Prepare for a Winter Storm

America's PrepareAthon: Winter Storm. Be Smart. Know your Hazards

Ready.gov: Snowstorms and Extreme Cold

Photo courtesy of Bing free graphics

# On the Safe Side

## Remember Portable Ladder Safety Whether On or Off the Job

Editor's note: The following information from the U.S. Department of Labor, Occupation Safety and Health Administration, is a safety reminder provided for the benefit of all Regional employees and their families through coordination with the Regional Safety and Occupational Health Office, in recognition of the coming holiday season and related outside home-decorating activities.

Falls from portable ladders (step, straight, combination, and extension) are one of the leading causes of occupational fatalities and injuries. For safe ladder use, read and follow all labels/markings on the ladder, and heed the following tips:

- Avoid electrical hazards! Look for overhead power lines before handling a ladder. Avoid using a metal ladder near power lines or exposed energized electrical equipment.
- Always inspect the ladder prior to using it. If the ladder is damaged, it must be removed from service and tagged until repaired or discarded.
- Always maintain a 3-point (two hands and a foot, or two feet and a hand) contact on the ladder when climbing. Keep your body near the middle of the step and always face the ladder while climbing (see diagram).

3-Point Contact

- Only use ladders and appropriate accessories (ladder levelers, jacks, or hooks) for their designed purposes.
- Ladders must be free of any slippery material on the rungs, steps, or feet.
- Do not use a self-supporting ladder (e.g., step ladder) as a single ladder or in a partially closed position.
- Do not use the top step/rung of a ladder as a step/rung unless it was designed for that purpose.
- Use a ladder only on a stable and level surface, unless it has been secured (top or bottom) to prevent displacement.
- Do not place a ladder on boxes, barrels, or other unstable bases to obtain additional height.
- Do not move or shift a ladder while a person or equipment is on the ladder.
- An extension or straight ladder used to access an elevated surface must extend at least 3 feet above the point of support (see diagram). Do not stand on the three top rungs of a straight, single or extension ladder.
- The proper angle for setting up a ladder is to place its base a quarter of the working length of the ladder from the wall or other vertical surface (see diagram).
- A ladder placed in any location where it can be displaced by other work activities must be secured to prevent displacement or a barricade must be erected to keep traffic away from the ladder.
- Be sure that all locks on an extension ladder are properly engaged.
- Do not exceed the maximum load rating of a ladder. Be aware of the ladder's load rating and of the weight it is supporting, including the weight of any tools or equipment.

## Preparing and Cooking Food

FoodSafety.gov

One of the basics of food safety is cooking food to its proper temperature. Foods are properly cooked when they are heated for a long enough time and at a high enough temperature to kill the harmful bacteria that cause foodborne illness.

- Minimum Cooking Temperatures
- Meat and Poultry Roasting Chart
- Ham Cooking Chart
- Turkey Thawing Chart
- Turkey Roasting Chart
- Alternative Ways to Cook Turkey


OSHA Updates Guidelines for Safety Program Management

# On the Safe Side

## Defensive Driving – Road Rage

Don McBride | Safety and Occupational Health Manager | Phoenix Area Office

Road rage is defined as: the loss of emotional control while driving. Most of us have witnessed it. Some of us have engaged in it.

Congested traffic, busy schedules and "idiots" on the road are all facts of life. Aggressive behavior is relatively common. Venting your frustration is normal. But aggression and hostility combined with stress and frustration when driving, often equals road rage, which can escalate to become an accident or even to fatal extremes.

SO – You're in your car, on your way to work. You think your car is a protected environment and you think no one's going to be able to get to you. A car is like a second home, almost an extension of the driver. It gives the driver power, protection, and autonomy. An illusion that you are safer than you really are!


If you get cut-off by another driver and you feel the rush of adrenaline, and you think you can give them the "finger" without any response or consequences. Think again. Most motorists will respond to perceived threats in a territorial fashion. You don't have any idea how the other person will respond, if they are mentally ill, intoxicated, or if they have a handgun in the glove compartment.

So how do we protect ourselves from road rage?

- Don't engage – Back off and take a deep breath, and let the other person win (I know that is difficult to do, but it may save your life)
- Never leave your car if you are in a compromising situation. Don't roll down your window to engage the other driver. Try to defuse a potentially violent situation as best you can without confrontation
- Call 411 to report an incident to the local police
- Call 911 for a true emergency or if you feel threatened

## One News Story That Will Not Feature Reclamation

Nathan Lenon | Biologist | Lower Colorado River Multi-Species Conservation Program

Sometimes safety can be a tough job. It's hard to tell if what you are doing makes a difference, because it's more about the things that don't happen, rather than the things that do happen.

Recently, I was picking my son up at his grandmother's house and she was watching the news, as usual. There's always some kind of story to be alarmed about anymore and I usually tune most of it out to stay sane. However, there was a story about a local middle school, which officials closed to allow for the recovery of about a quarter cup of mercury.

So, it made me think back to the time earlier this year, when we decommissioned a very large mercury barometer and replaced it with a non-mercury version. Despite a safety inspection that identified the barometer as an issue, I was reluctant initially to view it as a significant hazard. We did not want to get rid of it, because it was needed for its precise measurements necessary for the calibrating water quality probes and we weren't aware that high precision non-mercury barometers existed. This barometer had been in use for about 20 years without a problem.

Our mercury barometer had approximately the same volume of mercury that was responsible for the recent school closure. In the unlikely event the barometer was damaged and caused a mercury spill, one can imagine the disruption that would occur if we had had an event like that take place on our campus! We now have a new non-mercury barometer, capable of precise measurements, while eliminated the hazard completely.


Continued on the next page

# On the Safe Side

## How to Make a Cop Cry

Editor's note: This has run many times, in many variations, over the years in many. There is no one author that this is attributed to, though a version did run in Dear Abby in 1995.

Want to see a state trooper cry or drop to his knees, bury his face in his hands, bawl like a baby, and slam his fist into the side of his patrol car? It's easy enough to do. And it happens more frequently than you think.

Just load yourself up with "holiday cheer," add a few beers and some mixed drinks, and drive your family home. Refuse to listen when your wife suggests that maybe she should drive. Assert yourself. Be guided by your male ego. Say, "Aw, heck, I can drive better with a few beers under my belt than you can stone sober." Show her who's boss in your family!

Twenty minutes later, you're on the side of a highway with broken glass. Your wife is screaming, pinned beneath jagged edges of twisted steel. Your 2-year-old daughter is silent. Your 6-year-old son is sprawled face down in the mud some 30 feet away.

The police arrives and smells the alcohol on your breath as you stumble and try to explain how it happened. He is not very gentle as he arrests you for "driving under the influence" and pushes you into the rear seat of the patrol car.

The trooper then turns around and pauses for a few moments in the cold, lonely night. Tears fill his eyes as he shifts his attention back to what remains of your family.

Congratulations, you made a cop cry.

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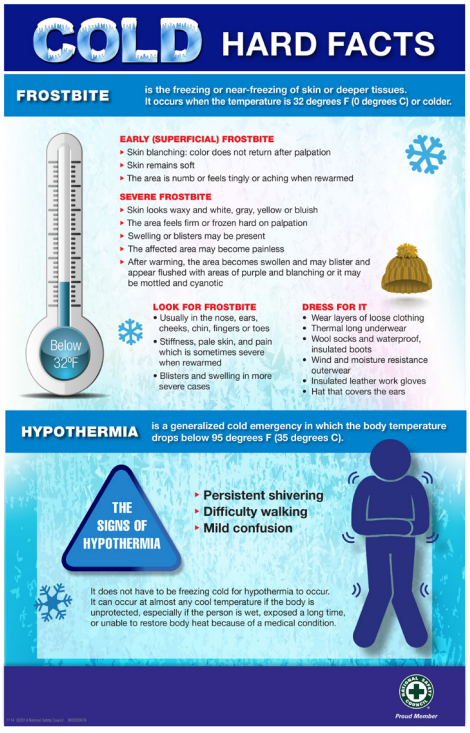
**One News Story That Will Not Feature Reclamation**

Continued from previous page

### Mercury-Free Barometer

The new unit, located in the Fish Laboratory, is called an Innovacelli Barometer. According to the product's website, in 2009 Dingens Barometers & Clocks launched a new innovative barometer system without the use of mercury to meet environmental demands. Its vacuum metal cells react to the changing air pressure. A combination of eight vacuum cells can give an extremely accurate measurement of even the slightest change in pressure. These movements are passed on to a liquid in a glass capillary tube, which in turn can display the pressure exceedingly accurately. The combination of air pressure boxes that contain a liquid is unique and guarantees that the pressure is conveyed without any friction occurring.

I share this information because the barometer is an example of a situation where there was resistance, initially, to making a recommended change that would remove a workplace hazard. It took some education to realize the potential risks of not taking action, as well as to identify an acceptable solution that would allow the work to still get done. Once we decided to move forward with following the safety recommendation, it's been fine, and we've removed a large hazard. An important part of building our safety culture is simply the willingness to be open to new ways of doing things, which can eliminate hazards, while still allowing work to be accomplished efficiently.




You can download this poster, Cold Hard Facts, from the National Safety Council to learn how to avoid frostbite and hypothermia